

# Preparation for the **Data Practice Bootcamp**

Fundamentals you should be familiar with  
before the bootcamp



## CODE

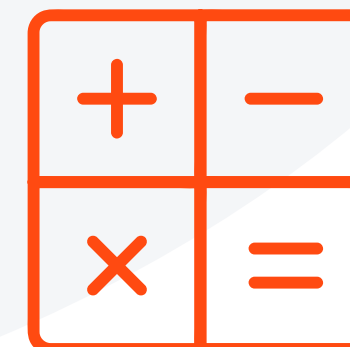


- Variables
- Different data types in python
- If/then/else and for loops
- How to write a function
- Different parenthesis
- Read from files
- Dictionaries, Lists, Sets, Arrays
- Basics of shell
- Basics of Github



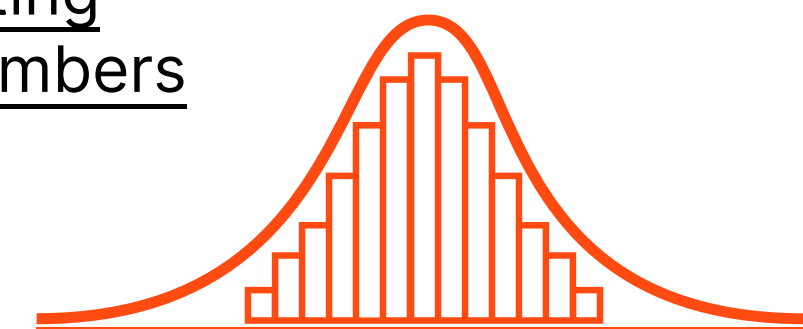
## MATH

- Exponential and Logarithms
- Vectors and matrices
- Linear combinations of vectors
- Matrix multiplication
- Dot product
- Matrix transposing and inversion
- Derivatives
- Hyperplanes



## STATS

- Mean and median, percentiles
- Standard deviation and Variance
- Principles of probabilities, law of total probability and chain rule of probability
- Statistical independence
- Probability distribution and density function
- Hypothesis testing
- Law of large numbers



Test your knowledge with our [pre-bootcamp quiz!!](#)